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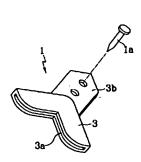
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BACKFLOW PREVENTION CAP FOR PANELS HAVING INTERLOCKING FOLDS



(57) Abstract: A backflow prevention cap for panels having interlocking folds, which prevents a backflow of water into seamed panels through fine gaps between the interlocking folds of the seamed panels by wind action. Each of panels has a tetragonal panel body (7), outer interlocking folds (9) provided by folding outwardly two neighboring sides of the panel body, and inner interlocking folds (11) provided by folding inwardly two remaining sides of the panel body. The backflow prevention cap includes a water shielding part (3) having a sheet-shaped wedge structure to be installed in the top ends of the outer interlocking folds (9) of each panel and supported in the top ends of the outer interlocking folds by a locking means when the panels are continuously seamed together through a fold-interlocking method.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC7 E04F 13/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 E04F 13/00 - 13/18

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for U, tility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indica	Relevant to claim No.	
A	JP 62-182314 U (Dowoo Kin Co.)	19 NOV 1987 All documents	1-6
A	JP 3-120711 U (Dowoo Kin Co.)	11 DEC 1991 Fig5	1-6
A	US 6,128,866 A (John R. Wearne)	10 OCT 2000 All documents	1
A	US 20010001404 A1 (Cris Damon)	24 MAY 2001 All documents	i
A	KR 2002-0367713 B (Woojung Co.)	27 DEC 2002 Fig3	1,6

		Further	documents	arc	listed	in t	he	continuation	of	Box	C.
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X See patent family annex.

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Date of mailing of the international search report

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 62-182314 U	19/11/1987	JP 1674451 C JP 3038368 B	26/06/1992 10/06/1991
JP 3-120711 U	11/12/1991	(NONE)	
US 6,128,866 A	10/10/2000	AU 5200698 A CA 2271773 A1 WO 9820210 A1	29/05/1998 14/05/1998 14/05/1998
US 20010001404 A1	24/05/2001	(NONE)	
KR 2002-0367713 B	27/12/2002	(NONE)	